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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,223	06/09/2006	William G. England	45038-320968 (PUR-0220)	7822
23370	7590	12/24/2009	EXAMINER	
JOHN S. PRATT, ESQ			KIM, SUN U	
KILPATRICK STOCKTON, LLP				
1100 PEACHTREE STREET			ART UNIT	PAPER NUMBER
SUITE 2800				1797
ATLANTA, GA 30309				
				MAIL DATE
				DELIVERY MODE
				12/24/2009 PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/550,223	ENGLAND, WILLIAM G.	
	<b>Examiner</b>	<b>Art Unit</b>	
	JOHN KIM	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 September 2009.
- 2a) This action is **FINAL**.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5, 7, 9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5, 7, 9 and 10 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/16/09, 11/3/09</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|   | 6) <input type="checkbox"/> Other: _____                          |

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 3,957,059 (Rainer et al).

Regarding claims 1-2, 7 and 9, Rainer et al disclose a novel composition of activated alumina impregnated with aqueous solution of sodium permanganate having at least 8% permanganate salt by weight e.g. from about 10% to about 20% by weight (see col. 2, line 65 – col. 3, line 6).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-2, 7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over England '522 (U.S. Patent No. 6,004,522).

Regarding claims 1-2 and 7, England '522 discloses a solid filtration composition impregnated with a permanganate and water wherein the concentration of permanganate salt in the composition is between approximately 5 and 12% permanganate by weight (see col. 6, lines 1-15; col. 7, line 32 – col. 8, line 31). England '522 further discloses that permanganate includes sodium permanganate, magnesium permanganate, calcium permanganate, barium permanaganate

and lithium permanganate (see col. 7, lines 46-59). Claims 1-2 and 7 essentially differ from the composition of England '522 in reciting the concentration of permanganate salt of at least approximately 8% permanganate salt. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2144.05. I.

Regarding claims 9-10, England '522 discloses the composition having a porous substrate comprising activated alumina, silica gel, zeolite, etc. (see col. 6, lines 1-4).

**5.** Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over England '522 as applied to claim 1 above, and further in view of US Patent No. 5,942,323 (England '323).

England '522 discloses a solid filtration composition as described above. England '525 teaches a solid filtration composition impregnated with a permanganate and water wherein the percentage of permanganate salt by weight is at least approximately 5% by weight (see col. 7, lines 46-57) and cites the concentration range between 5% and 12%.

Claims 3-5 essentially differ from the composition of England '522 in reciting a percentage of permanganate salt by weight greater than 12% by weight such as of at least about 13 to about 24% by weight (claim 3), at least about 15 to about 20% by weight (claim 4) or at least about 18% to about 19% by weight (claim 5). England '323 teaches a solid filtration composition impregnated with a permanganate salt wherein the percentage of permanganate salt by weight is between approximately 5 and 20% (see col. 7, lines 50-65, particularly lines 58-60). England '323 further teaches that permanganate provides controls the oxidizing reaction to destroy odors adsorbed by activated alumina (see col. 8, lines 22-34) and the higher

concentration of permanganate salt at the surface of the activated alumina is believed to provide higher capacity and efficiency of alumina (see col. 14, lines 47-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the percentage of permanganate salt by weight to provide desired capacity and efficiency of alumina, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

6. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainer et al. Rainer et al disclose a solid filtration composition as described above. Rainer et al teach that the composition has permanganate salt concentration of from about 5 to about 30% by weight (see col. 3, lines 2-7).

Claims 3-5 essentially differ from the composition of England '522 in reciting a percentage of permanganate salt by weight of at least about 13 to about 24% by weight (claim 3), at least about 15 to about 20% by weight (claim 4) or at least about 18% to about 19% by weight (claim 5). In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a *prima facie* case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2144.05. I. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the percentage of permanganate salt by weight to provide desired capacity and efficiency of alumina, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

7. Applicant's arguments with respect to claims 1-5, 7 and 9-10 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN KIM whose telephone number is (571)272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on 571-272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Kim/  
Primary Examiner, Art Unit 1797

JK  
12/18/09